



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/645,245 | 08/21/2003 | Wayne G. Floe | 6605A | 7547 |

7590 08/10/2005
Charles A. Johnson
1448 90th Avenue
Amery, WI 54001

| |
|----------|
| EXAMINER |
|----------|

LEE, JONG SUK

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

3673

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/645,245

Applicant(s)

FLOE ET AL.

Examiner

Jong-Suk (James) Lee

Art Unit

3673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,16-18,21,28-45 is/are rejected.
- 7) ☒ Claim(s) 3-15,19,20 and 22-27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed May 20, 2005 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the sixth paragraph of 35 U.S.C. 112:

An element in a claim for a combination may be expressed as a means or step for performing a specific function without the recital of structure, material, or acts in support thereof, and such claim, shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

3. Claims 28-45 are rejected under 35 U.S.C. 112, sixth paragraph, It is language itself of independent claims 28, 32 and 38, respectively, which must particularly point out and distinctly claim subject matter which Applicant regards as his invention, without limitations imported from specification, whether language is couched in terms of means plus function or consists of detailed recitation of inventive matter; limitations in specification not included in claim may not be relied upon to impart patentability to otherwise unpatentable claim. In re Lundberg & Zuschlag (CCPA) 113 USPQ 530.

Accordingly, means plus function language must be in accordance with the followings:

- i) Must be the phrase "means for" or "step for";
- ii) The "means for" or "step for" must be modified by functional language; and
- iii) The "means for" or "step for" must **not** be modified by sufficient structure, material or acts for achieving the specified function.

Art Unit: 3673

However, the claim language, for example, in claim 28 “footpad means for supporting an associated boatlift leg on a surface, height adjustment means for linearly altering the spacing of said footpad means with respect to the end of an associated boatlift leg....” recites the claimed element’s sufficient structural relationships therebetween.

Therefore, with respect to claims 28, 32 and 38, means plus function language should not be invoked under 112, 6th paragraph.

Claims 29-31, 33-37 and 39-45 are dependent upon claim 28, 32 and 38 respectively.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 21 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Hey (US 5,908,264).

Hey discloses a watercraft lift comprising: a footpad (40); a height adjustment mechanism (38) for use in colinear alignment with an associated boatlift leg and having a first end portion coupled to said footpad and having a second end portion; and a height adjustment actuator/sleeve with a pin (36) accessible along an associated boatlift leg and coupled to said second end portion at a predetermined angle with respect to said alignment, whereby the

Art Unit: 3673

relationship of said footpad with respect to an associated boatlift leg can be controlled (see Fig. 1: col.3, lines 53-67; col.4, lines 1-42).

6. Claim 38 is rejected under 35 U.S.C. 102(b) as being anticipated by Holmgren (US 5,655,850).

The preamble limitation, "For use with a power boatlift having a lifting structure including a ball screw mechanism and a winch cable for raising and lowering a lifting Structure" in lines 1-3 is intended use and no patentable weight is given to the preamble.

Holmgren discloses a drive unit comprising: an electric drive means (80) for providing power to the lifting structure for causing raising and lowering of the lifting structure by controlling the direction of rotation of a ball screw mechanism (83, 84, 86), said drive motor means including power input means for connecting to a source of electrical power; inherent switch means for applying direction control signals to said electric drive means; and logic means responsively coupled to said control signals for controlling the operation of said electric drive means to control the raising or lowering of the lifting structure (see Fig. 5: col.4, lines 27-55).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3673

8. Claims 1, 2 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over McLaughlin et al (US 6,230,639) in view of Holmgren. The teachings of Holmgren have been discussed above.

McLaughlin et al discloses a boat lift comprising: a plurality of support legs (14); a boat lifting structure (22) moveably mounted to said plurality of support legs; a cable assembly (40, 44) having a connecting end and a lifting end connected in cooperation with said boat lifting structure for causing said boat lifting structure to be raised or lowered; an electric drive unit (12) having a drive shaft (54, 56) capable of rotating in a first direction in response to a first input signal or rotating in a second direction in response to a second input signal; a drive coupling structure (52) coupled to said drive shaft (see Figs. 1-5; col.4, lines 11-67; col.5, lines 1-67; col.6, lines 1-21).

However, McLaughlin et al fails to disclose or fairly suggest a ball screw assembly having a first portion coupled to said coupling structure and a second portion coupled to said connecting end.

Holmgren discloses a drive unit comprising: an electric drive means (80) for providing power to the lifting structure for causing raising and lowering of the lifting structure by controlling the direction of rotation of the ball screw mechanism (83, 84, 86) having a first portion coupled to said coupling structure and a second portion coupled to said connecting end (Fig. 5), wherein said first portion of said ball screw assembly includes an elongated ball screw having a driving end coupled to said coupling structure wherein said coupling structure rotatably supports said driving end, and said second portion of said ball screw assembly includes a ball nut (83, 94) associated with said elongated ball screw, said ball screw having a cable connection

Art Unit: 3673

coupled to said connecting end of said cable assembly (see Fig. 5: col.4, lines 11-67; col.5, lines 1-67; col6, lines 1-21) as discussed in Paragraph No. 7.

Therefore, in view of Holmgren, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to replace the drive unit of McLaughlin with the drive with the ball screw mechanism in order to enhance the preciseness for the control of the boatlift device.

With respect to the brake mechanism, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to have a conventional brake system to the drive assembly in case of emergency handling situation for the boat lift device.

9. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over McLaughlin et al, as modified by Holmgren, as applied to claim 1, further in view of Hey. The teachings of McLaughlin, Holmgren and Hey have been discussed above.

However, the teachings of McLaughlin modified by Holmgren fail to disclose or fairly suggest the boatlift leveling mechanism. Hey discloses a watercraft lift comprising: a footpad (40); a height adjustment mechanism (38) for use in colinear alignment with an associated boatlift leg and having a first end portion coupled to said footpad and having a second end portion; and a height adjustment actuator/sleeve with a pin (36) accessible along an associated boatlift leg and coupled to said second end portion at a predetermined angle with respect to said alignment, whereby the relationship of said footpad with respect to an associated boatlift leg can be controlled as discussed in Paragraph No. 6.

Therefore, in view of Hey, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to add the boat leveling mechanism to the leg of McLaughlin's boat lift, as modified by Holmgren in order to enhance the stability of the boat lift to the desired installation site.

Response to Arguments

10. Applicant's arguments filed May 20, 2005 have been fully considered but they are not persuasive.

With respect to claim 21, Applicant argues that Hey reference does not teach a height adjustment mechanism and/or actuator. However, Hey discloses a height adjustment mechanism (38) which is adjustable in height with respect to the footpad and further the height adjustment actuator (28, 30, 32) provides the high and low height by being horizontally oriented.

With respect to claims 28, 32 and 38, the claim limitations have not been considered as means plus function language and the patentable weight are given to the structural element itself. Therefore, applicant's arguments are moot.

With respect to the applicant argument as to claims 1, 2 and 16 that there is no attempt to show any suggestion or motivation to make the substitution suggested by examiner, the primary reference, McLaughlin discloses a drive mechanism (13) with motor, reduction and winder drums (Fig. 4) to operate the boat lifter and the secondary reference, Holmgren discloses a drive mechanism including a boll screw mechanism as depicted in Figs. 4-5 and the McLaughlin's drive device can be replaced with the Holmgren's drive mechanism by simply attaching the ball screw drive mechanism to the side of the McLaughlin's boat lift structures and further with

Art Unit: 3673

respect to the brake mechanism, an artisan within the ordinary skill in the art would have installed a conventional brake mechanism to the part of the drive mechanism to either or the combined boat lift system although the brake mechanisms may be different in two references' boat lift system.

Allowable Subject Matter

11. Claims 32-37 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 6th paragraph, set forth in this Office action.

Claims 3-15, 19, 20 and 22-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 29-31 and 39-45 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

Art Unit: 3673


will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jong-Suk (James) Lee whose telephone number is (571) 272-7044. The examiner can normally be reached on 6:30 am to 3:00 pm, Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather C. Shackelford can be reached on (571) 272-7049. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

J. Lee /jjl
August 5, 2005



Jong-Suk (James) Lee
Primary Examiner
AU 3673